CLAIMS

1. An organic electrolyte capacitor comprising:

a positive electrode,

a negative electrode, and

an electrolyte capable of transporting lithium ions, wherein

the positive electrode is able to support lithium ions and anions reversibly;

the negative electrode is able to support the lithium ions reversibly; and

let a (mAh) be a cell capacity when the organic electrolyte capacitor in a charged state is discharged to half a charging voltage over 1 ± 0.25 hours, and b (mAh) be a full negative electrode capacity that is a capacity when the negative electrode in the charged state is discharged to 1.5 V (Li/Li+), then a ratio of a positive electrode active material and a negative electrode active material is controlled to satisfy $0.05 \leq a/b \leq 0.3$.

2. The organic electrolyte capacitor according to Claim 1, wherein

the lithium ions have been preliminarily supported on the negative electrode and/or the positive electrode.

3. The organic electrolyte capacitor according to Claim 1 or 2, wherein

a capacitance per unit weight of the negative electrode active material is three times or more a capacitance per unit weight of the positive electrode active material, and

a weight of the positive electrode active material is larger than a weight of the negative electrode active material.

4. The organic electrolyte capacitor according to any of Claims 1 through 3, further comprising:

a positive electrode current collector and a negative electrode current collector, wherein

each collector is provided with pores penetrating through from the front surface to the back surface; and

the lithium ions are supported on the negative electrode and/or the positive electrode by an electrochemical contact with a lithium electrode facing the negative electrode and/or the positive electrode.